

(b) Amendments to the Claims

Please cancel claim 13 without prejudice or disclaimer of subject matter.

Kindly amend claims 1-4 and 15-18 as follows:

1. (Currently Amended) A deposited-film formation process for controlling film formation temperature in which a source gas is fed into a discharge space of a reactor, a plurality of discharge means are disposed in the reactor and an electric power is applied to generate discharge in the discharge space to decompose the source gas, thereby forming a deposited film on a substrate; the process comprising transporting the substrate through the reactor during the film formation ~~disposing a plurality of discharge means in the reactor~~ and having:

a first step of applying an electric power to a first discharge means to generate discharge to form the deposited film; and

a second step of applying an electric power to a second discharge means to generate discharge to form the deposited film;

said first step and said second step being switched from one to another at a stated timing, wherein the deposited film formed through said first step and the deposited film formed through said second step are semiconductor layers having the same conductivity type.

2. (Currently Amended) A deposited-film formation process for controlling film formation temperature in which a source gas is fed into a discharge space

of a reactor, a plurality of discharge means are disposed in the reactor and an electric power is applied to generate discharge in the discharge space to decompose the source gas, thereby forming a deposited film on a substrate; the process comprising transporting the substrate through the reactor during the film formation ~~disposing a plurality of discharge means in the reactor~~ and having:

a first step of applying to a first discharge means an electric power larger than that for a second discharge means to generate discharge to form the deposited film; and

a second step of applying to the second discharge means an electric power larger than that for the first discharge means to generate discharge to form the deposited film;

said first step and said second step being switched from one to another at a stated timing wherein the deposited film formed through said first step and the deposited film formed through said second step are semiconductor layers having the same conductivity type.

3. (Currently Amended) A deposited-film formation process for controlling film formation temperature in which a source gas is fed into a discharge space of a reactor, a plurality of discharge means are disposed in the reactor and an electric power is applied to generate discharge in the discharge space to decompose the source gas, thereby forming a deposited film on a substrate; the process comprising transporting the

substrate through the reactor during the film formation ~~disposing a plurality of reactors~~
~~having at least one discharge means~~ and having:

a first step of applying an electric power to a first discharge means in
a first reactor to generate discharge to form the deposited film; and

a second step of applying an electric power to a second discharge
means in a second reactor to generate discharge to form the deposited film;

said first step and said second step being switched from one to
another at a stated timing wherein the deposited film formed through said first step and the
deposited film formed through said second step are semiconductor layers having the same
conductivity type.

4. (Currently Amended) A deposited-film formation process for
controlling film formation temperature in which a source gas is fed into a discharge space
of a reactor, a plurality of discharge means are disposed in the reactor and an electric power
is applied to generate discharge in the discharge space to decompose the source gas,
thereby forming a deposited film on a substrate; the process comprising transporting the
substrate through the reactor during the film formation ~~disposing a plurality of reactors~~
~~having at least one discharge means~~ and having:

a first step of applying to a first discharge means in a first reactor an
electric power larger than that for a second discharge means in a second reactor to generate
discharge to form the deposited film; and

a second step of applying to the second discharge means in the second reactor an electric power larger than that for the first discharge means in the first reactor to generate discharge to form the deposited film;

said first step and said second step being switched from one to another at a stated timing wherein the deposited film formed through said first step and the deposited film formed through said second step are semiconductor layers having the same conductivity type.

5. (Original) The deposited-film formation process according to claim 2, wherein in the first step the electric power is applied to the second discharge means to generate discharge to an extent that does not affect the film formation, and in the second step the electric power is applied to the first discharge means to generate discharge to an extent that does not affect the film formation.

6. (Original) The deposited-film formation process according to claim 1, wherein the first step and the second step are switched from one to another on the basis of a film formation temperature that has reached a temperature within a temperature range set beforehand.

7. (Original) The deposited-film formation process according to claim 1, wherein said first step and said second step are switched from one to another on the basis of a self-bias voltage that has reached a voltage within a voltage range set beforehand.

8. (Original) The deposited-film formation process according to claim 1, wherein said first step and said second step are switched from one to another on the basis of a self-bias electric current that has reached an electric current within an electric-current range set beforehand.

9. (Original) The deposited-film formation process according to claim 1, wherein said first step and said second step are switched from one to another within a film formation time range set beforehand.

10. (Original) The deposited-film formation process according to claim 1, wherein said first and second discharge means are controlled within a stated temperature range.

11. (Original) The deposited-film formation process according to claim 1, which comprises a step of keeping the electric power applied to said first discharge means and said second discharge means to generate discharge through the respective discharge means when said first step and said second step are switched from one to another.

12. (Original) The deposited-film formation process according to claim 1, wherein, when said first step and said second step are switched from one to another, the

electric power for said first discharge means is gradually decreased or increased and the electric power for said second discharge means is gradually increased or decreased.

13. (Cancelled)

14. (Original) The deposited-film formation process according to claim 1, wherein a distance between said first and second discharge means and a substrate on which the deposited films are formed is in the range of from 5 mm to 50 mm, and a pressure at which the deposited films are formed is in the range of from 10 Pa to 800 Pa.

15. (Withdrawn - Currently Amended) A deposited-film formation system for controlling film formation temperature in which a source gas is fed into a discharge space of a reactor and an electric power is applied to generate discharge in the discharge space to decompose the source gas, thereby forming a deposited film on a substrate of semiconductor layers having the same conductivity type; the system comprising:

- means to transport the substrate during film formation;
- a plurality of discharge means disposed in the reactor; and
- a means for switching i) a first step of generating discharge by a first discharge means to form a semiconductor layer of a first conductivity type ~~the deposited film~~ and ii) a second step of generating discharge by a second discharge means to form another semiconductor layer of the first conductivity type ~~the deposited film~~, from one to

another on the basis of a value detected by a means for detecting a stated film formation parameter.

16. (Withdrawn - Currently Amended) A deposited-film formation system for controlling film formation temperature in which a source gas is fed into a discharge space of a reactor and an electric power is applied to generate discharge in the discharge space to decompose the source gas and thereby form a deposited film on a substrate of semiconductor layers having the same conductivity type; the system comprising:

means to transport the substrate during film formation;

a plurality of discharge means disposed in the reactor; and

a means for switching i) a first step of applying to a first discharge

means an electric power larger than that for a second discharge means to generate

discharge to form a semiconductor layer of a first conductivity type ~~the deposited film~~ and

ii) a second step of applying to the second discharge means an electric power larger than

that for the first discharge means to generate discharge to form another semiconductor layer

of the first conductivity type ~~the deposited film~~, from one to another on the basis of a value

detected by a means for detecting a stated film formation parameter.

17. (Withdrawn - Currently Amended) A deposited-film formation system for controlling film formation temperature in which a source gas is fed into a discharge space of a reactor and an electric power is applied to generate discharge in the

discharge space to decompose the source gas, thereby forming a deposited film on a substrate of semiconductor layers having the same conductivity type; the system comprising:

means to transport the substrate during film formation;

a plurality of discharge means disposed in the reactor; and

a means for switching i) a first step of applying an electric power to a first discharge means in a first reactor to generate discharge to form a semiconductor layer of a first conductivity type ~~the deposited film~~ and ii) a second step of applying an electric power to a second discharge means in a second reactor to generate discharge to form another semiconductor layer of the first conductivity type ~~the deposited film~~, from one to another on the basis of a value detected by a means for detecting a stated film formation parameter.

18. (Withdrawn - Currently Amended) A deposited-film formation system for controlling film formation temperature in which a source gas is fed into a discharge space of a reactor and an electric power is applied to generate discharge in the discharge space to decompose the source gas, thereby forming a deposited film on a substrate of semiconductor layers having the same conductivity type; the system comprising:

means to transport the substrate during film formation;

a plurality of reactors having at least one discharge means, disposed in the reactor; and

a means for switching i) a first step of applying to a first discharge means in a first reactor an electric power larger than that for a second discharge means in a second reactor to generate discharge to form a semiconductor layer of a first conductivity type ~~the deposited film~~ and ii) a second step of applying to the second discharge means in the second reactor an electric power larger than that for the first discharge means in the first reactor to generate discharge to form another semiconductor layer of the first conductivity type ~~the deposited film~~, from one to another on the basis of a value detected by a means for detecting a stated film formation parameter.

19. (Withdrawn) The deposited-film formation system according to claim 15, wherein said film formation parameter is film formation temperature.

20. (Withdrawn) The deposited-film formation system according to claim 15, wherein said film formation parameter is self-bias voltage.

21. (Withdrawn) The deposited-film formation system according to claim 15, wherein said film formation parameter is self-bias electric current.

22. (Withdrawn) The deposited-film formation system according to claim 15, wherein said film formation parameter is film formation time.

23. (Withdrawn) The deposited-film formation system according to claim 15, wherein said first and second discharge means are controlled within a stated temperature range.

24. (Withdrawn) The deposited-film formation system according to claim 15, wherein, when said first step and said second step are switched from one to another, the electric power for said first discharge means is gradually decreased or increased and the electric power for said second discharge means is gradually increased or decreased.